

67. A magnetoresistive-effect device according to claim 63, wherein the width dimension of a portion of each electrode layer extending over said multilayer film is within a range from 0  $\mu\text{m}$  to 0.08  $\mu\text{m}$ .

68. A magnetoresistive-effect device according to claim 67, wherein the width dimension of the portion of each electrode layer extending over said multilayer film is equal to or larger than 0.05  $\mu\text{m}$ .

69. A magnetoresistive-effect device according to claim 63, wherein an insulator layer is deposited between said electrode layers, which are deposited above and on both sides of said multilayer film, and the end face of said insulator layer is in direct contact with each of said electrode layers or is separated from each of said electrode layers by a layer.

70. A magnetoresistive-effect device according to claim 63, wherein said multilayer film comprises a central sensitive region which provides an excellent reproduction gain, exhibiting a substantial magnetoresistive effect and insensitive regions which are formed on both sides of said sensitive region, and provide a poor reproduction gain, exhibiting no substantial magnetoresistive effect, and wherein said electrode layers deposited on both sides of said multilayer film extend over the insensitive regions of said multilayer film.

71. A magnetoresistive-effect device according to claim 63, wherein said sensitive region of said multilayer film is defined as a region which results in an output equal to or greater than 50% of a maximum reproduction output while said insensitive regions of said multilayer film are defined as regions, formed on both sides of said sensitive region, which result in an output smaller than 50% of the maximum reproduction output, when the magnetoresistive-effect device having the electrode layers deposited on both sides only of said multilayer film scans a micro track, having a signal recorded thereon, in the direction of a track width.

72. A magnetoresistive-effect device according to claim 63, wherein the width dimension of said sensitive region of said multilayer film is equal to an optical track width.

73. A magnetoresistive-effect device according to claim 63, wherein the angle made between the surface of said protective layer or the surface of said multilayer film with said protective layer removed therefrom and the end face of said electrode layer extending over said insensitive region of said multilayer film is within a range of 20 degrees to 60 degrees.

74. A magnetoresistive-effect device according to claim 63, wherein the angle made between the surface of said multilayer film and the end face of said electrode layer extending over said insensitive region of said multilayer film is within a range of 25 degrees to 45 degrees.

75. A magnetoresistive-effect device according to claim 65, wherein the angle made between the surface of said protective layer or the surface of said multilayer film with said protective layer removed therefrom and the end face of said electrode layer extending over said insensitive region of said multilayer film is within a range of 20 degrees to 60 degrees.

76. A magnetoresistive-effect device according to claim 65, wherein the angle made between the surface of said protective layer or the surface of said multilayer film with said protective layer removed therefrom and the end face of said electrode layer extending over said insensitive region of said multilayer film is within a range of 25 degrees to 45 degrees.

77. A magnetoresistive-effect device according to claim 69, wherein the angle made between the surface of said protective layer or the surface of said multilayer film with said protective layer removed therefrom and the end face of said electrode layer extending over said insensitive region of said multilayer film is 60 degrees or greater.

78. A magnetoresistive-effect device according to claim 69, wherein the angle made between the surface of said protective layer or the surface of said multilayer film with said protective layer removed therefrom and the end face of said electrode layer extending over said insensitive region of said multilayer film is 90 degrees or greater.

79. A magnetoresistive-effect device according to claim 69, wherein the width dimension of a portion of each electrode layer extending over said multilayer film is equal to the width dimension of said insensitive region of said multilayer film.

80. A magnetoresistive-effect device according to claim 63, wherein an intermediate layer, made of at least one of a high-resistivity material having a resistance higher than that of said electrode layer and an insulating material, is interposed between said hard bias layer and said electrode layer.

81. A magnetoresistive-effect device according to claim 80, wherein said high-resistivity material, which fabricates said intermediate layer interposed between said hard bias layer and said electrode layer, is at least one material selected from the group consisting of TaSiO<sub>2</sub>, TaSi, CrSiO<sub>2</sub>, CrSi, WSi, WSiO<sub>2</sub>, TiN, and TaN.

82. A magnetoresistive-effect device according to claim 80, wherein said high-resistivity material, which fabricates said intermediate layer interposed between said hard bias layer and said electrode layer, is at least one material selected from the group consisting of Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, Ti<sub>2</sub>O<sub>3</sub>, TiO, WO, AlN, Si<sub>3</sub>N<sub>4</sub>, B<sub>4</sub>C, SiC, and SiAlON.

83. A method for manufacturing a magnetoresistive-effect device comprising the steps of:

laminating, on a substrate, a multilayer film for exhibiting the magnetoresistive effect;

depositing, on a sensitive region of said multilayer film, a lift-off resist layer having an undercut on the underside thereof facing insensitive regions of said multilayer film, wherein said sensitive region and said insensitive regions are beforehand measured through a micro track profile method;

depositing bias layers on both sides of said multilayer film and magnetizing said bias layers in the direction of a track width;

depositing an electrode layer on the said bias layer at a slant angle with respect to said multilayer film, wherein said electrode layer is deposited into the undercut on the underside of said resist layer arranged on said multilayer film; and

removing said resist layer from said multilayer film.

84. A method for manufacturing a magnetoresistive-effect device according to claim 83, comprising depositing a protective layer as a top layer on said multilayer film in the step of laminating, on the substrate, said multilayer film for exhibiting the magnetoresistive effect;

depositing said lift-off resist layer on top of said protective layer in the sensitive region of said multilayer film, in